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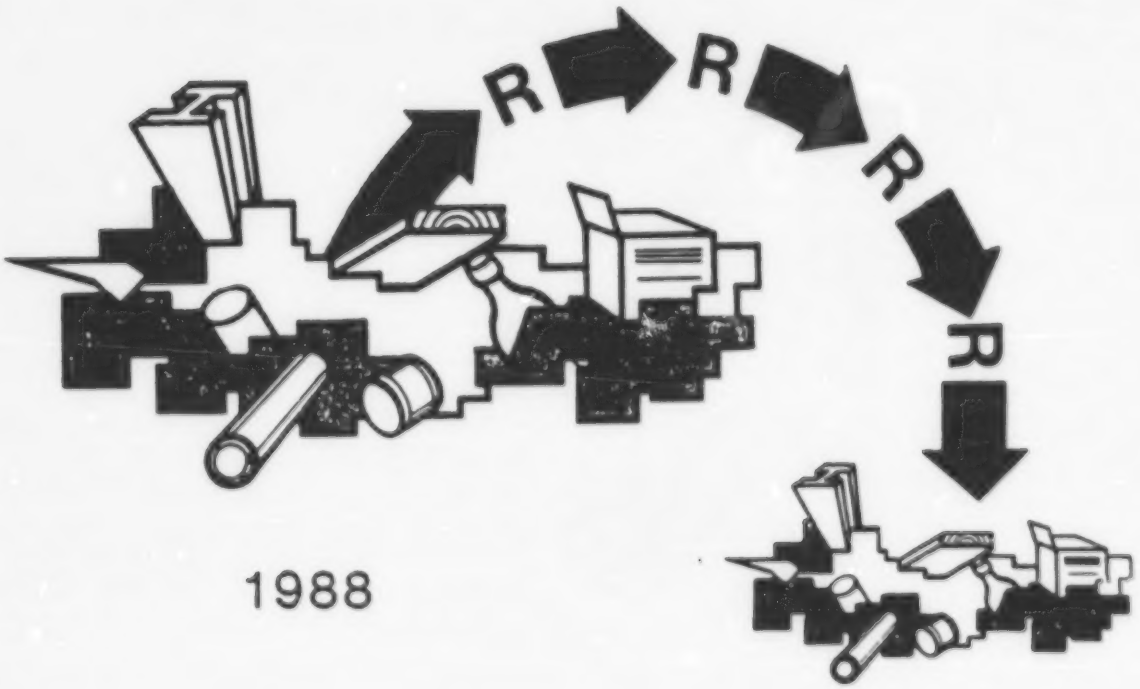
Household Consumers and Packaging



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HOUSEHOLD CONSUMERS AND PACKAGING:

AN OVERVIEW OF CURRENT TRENDS, INITIATIVES AND IMPLICATIONS FOR THE NATIONAL PACKAGING PROTOCOL

RSMI
RESOURCE SYSTEMS MANAGEMENT INTERNATIONAL INC.

May 1990

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1.0 INTRODUCTION

1.1 Study Goals and Objectives

This report was prepared as a background study document, related to the preparation of a National Packaging Protocol (NAPP) for the Canadian Council of Ministers of the Environment (CCME). The objective of the NAPP is to set targets and schedules for the minimization of packaging waste and contribute to a 50 per cent overall reduction in waste generation by the year 2000. The Study Team was comprised of MacLaren Engineers, RSMI - Resource Systems Management International Inc., MWR & Associates, The Coopers & Lybrand Consulting Group, VHB Research and Consulting Inc. and Ramsay & Associates.

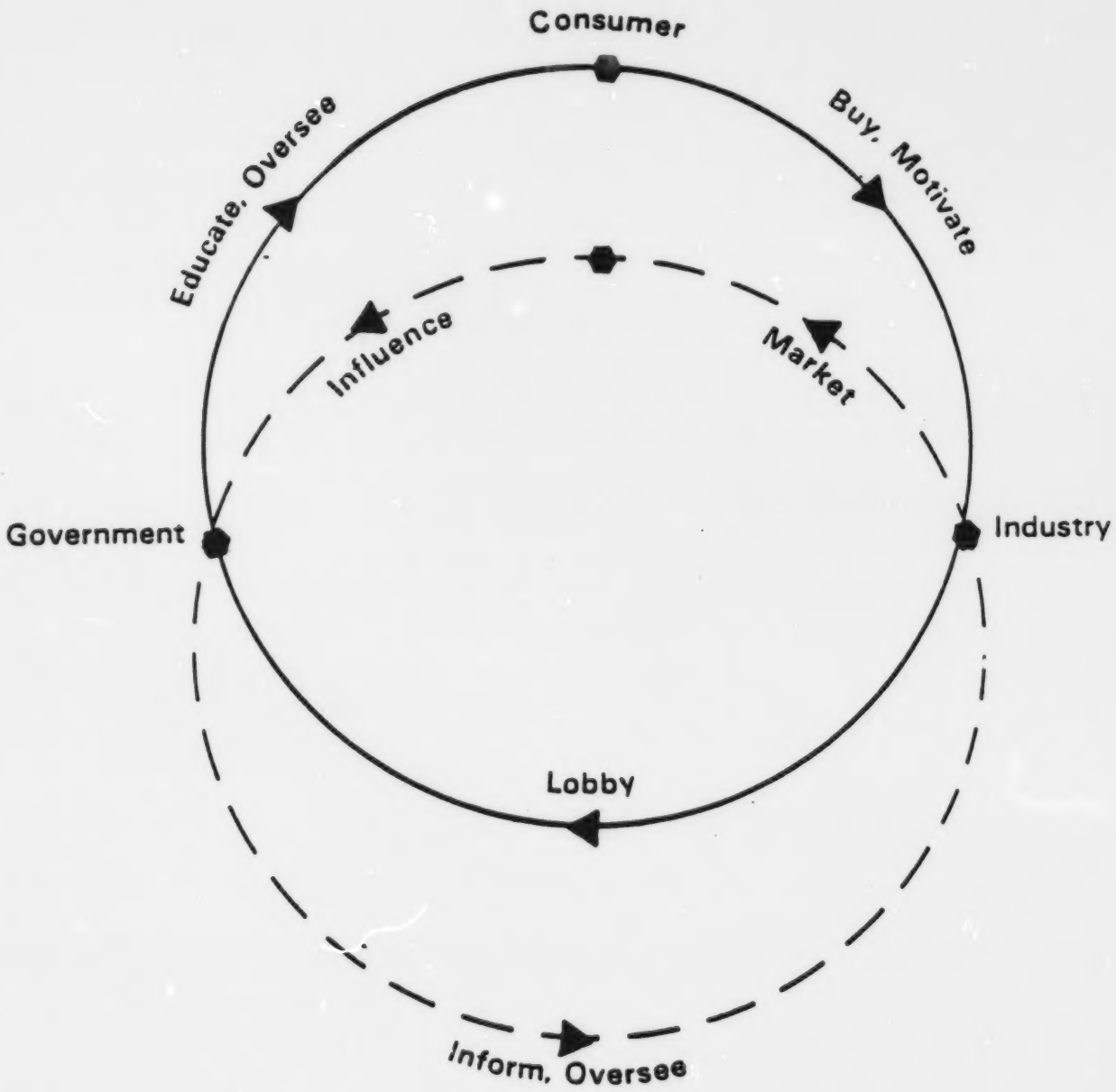
It is imperative that the role of consumers in achieving waste reduction targets be appreciated, as it is they who ultimately make the purchasing and choices, pay for waste disposal and minimization initiatives and can affect industry and government behaviour in the area of packaging waste. Figure 1-1, following, illustrates the marketplace interrelationships between consumers, industry and government. The three marketplace participants are dynamically and inextricably linked. As the diagram illustrates, the consumer motivates industry by buying certain products. Industry responds with their initiatives in the marketplace. Industry can also lobby government agencies, who are also influenced by consumer activism. Government can inform and oversee industry, and also educate the consumer.

This study has been conducted to provide an overview of attitudes, behaviours, trends and stakeholders' initiatives related to household consumers and packaging, and to respond to the following key questions, among others:

- What is the level of awareness among consumers with regard to solid waste and packaging waste management issues such as disposal and its implications for the environment?
- Will consumers pay more for products/packaging that are advertised to be "environmentally sensitive"?
- What trends are shaping consumer behaviour?
- How are industry, government agencies and non-governmental organizations reacting to consumer concerns, demands and trends?
- What are the implications of consumer trends and issues for creation of a practical and realistic National Packaging Protocol?

FIGURE 1-1[1]

MARKETPLACE INTER-RELATIONSHIPS BETWEEN CONSUMERS, INDUSTRY, AND GOVERNMENT



[1]Source: "Promoting Source Reduction and Recyclability in the Marketplace", U.S. Environmental Protection Agency, September, 1989.

A further important point to note with regard to the issues under study is that a dichotomy exists with regard to the industry/consumer relationship:

> Is it the **consumer** who, by demanding environmentally-sensitive packaging, leads industry towards the production of such packaging, **or** is it up to **industry** to lead the way by developing such packaging, marketing it effectively and educating the public as to its merits?

There are no definitive answers to this question, and opinions vary greatly.

Generally, the present study has attempted to explore the **role** of the household consumer in the solid waste management process with specific regard to purchase and disposal of packaging, to identify **trends** in consumer attitudes and behaviour, to identify some of the **initiatives** being undertaken by the various players (i.e., industry, government and non-governmental organizations), and to outline possible **actions** that can lead to positive consumer response to the NAPP objectives and other solid waste management initiatives. Consumer-oriented initiatives will be important in the creation of long-lasting solutions to Canada's solid waste management problems.

1.2 Study Limitations

As noted above, the purpose of this report is to provide an **overview** of consumer attitudes, issues and trends, and current initiatives as they relate to the packaging waste disposal problem in Canada. Detailed and focused research on this subject is a newly emerging area which will require comprehensive survey work and significant additional research before any definitive statements can be made. Certain observable trends and issues are emerging, however, and these can be discussed in light of the NAPP initiative along with recommendations for further work.

It should also be noted that this report is focused on **household consumers**, and does not necessarily provide a full picture of the trends and issues as they may relate to commercial and industrial users of packaging. A further limitation to the present study is the confidentiality of some survey and poll-related information. We have attempted to express some of this data in broad terms, for the purpose of the present report.

2.0 STUDY CONTEXT

2.1 Current Waste Management Situation and Related Trends in Packaging: An Overview

Canada, like many societies in the developed world, is currently confronted with a number of pressing issues related to the management of municipal solid waste. The major current problems, which are most acute in the major urban centres, include the **high cost** of managing waste and the rapidly increasing **shortage of landfill capacity.**

As aptly noted in the most recent (February 1989) document on the subject prepared by the U.S.A.'s Environmental Protection Agency, the high costs and capacity shortages are, however, only **symptoms of a more basic problem** that is likely very comparable to our situation in Canada:[1]

> Most of America's **citizens, officials and industry have yet to recognize their responsibility for the growth in solid waste and for the problems caused by that growth.**
>
> In 1960, Americans generated waste at a rate of 2.65 (1.2 kg) pounds per person per day; by 1986 that figure jumped to 3.58 (1.6 kg) pounds and the trend is projected to continue into the year 2000... Much of the [increase] can be traced to the high level of **product manufacture** and **consumption** in this country and the need for **convenience** on the part of increasingly busy families.

In Canada, it has been reported that each person is producing almost **five pounds** (2.2 kg) of garbage per day, making this country's citizens among the top waste generating peoples in the world, and of particular note is the fact that consumer product packaging contributes up to 30 per cent of the volume of this waste.[2]

Some packaging statistics and trends of interest in the context of the present study have been compiled by the Environmentally Sound Packaging Coalition (ESP) in B.C., and are outlined below.[3] These are provided for general information purposes only. It is recognized that there a variety of estimates as to the exact

---

[1]Source: The Solid Waste Dilemma: An Agenda For Action, United States Environmental Protection Agency, February 1989, p.12-13.

[2]Source: "Garbage Crisis", Food in Canada, April 1988. Note that estimates vary somewhat between sources.

[3]Source: "Fact Sh ..s Nos. 1 and 2", Environmentally Sound Packaging Coalition (ESP), Vancouver, 1989.

numbers cited, however certain patterns and trends can perhaps be discerned. The reader is referred to additional NAPP background reports for more recent Canadian data pertaining to certain of these trends and issues.

- Since 1960 the amount of packaging in garbage has increased by 80 percent. (Legislative Commission on Solid Waste Management Examiner, Spring/Summer 1988, B.C.);

- In Canada, less than 2 per cent of our waste stream is actually recycled, compared to 10 per cent in the U.S., 16 per cent in West Germany and 51 per cent in Japan. (Waste management 1987", Maclean Hunter Research Bureau);

- Consumers never see the hidden costs of packaging which can exceed 50 per cent of the total cost of a product. (Protect Yourself, May 1985, p.18);

- On average, packaging accounts for 40 per cent of the cost of a product in a throw-away glass container, 35 per cent of baby food, and 25 per cent of motor oil. (Waterloo Public Interest Research Group. Proceedings of the Forum on Excessive Packaging at the University of Waterloo, June 10, 1988, p.7);

- In Quebec, packages account for 65 per cent of the numbers of objects in litter, for 43 per cent of the weight and for 55 per cent of the volume. (Quebec Ministry of the Environment, 1988);

- The number of product units that a major Canadian drug store chain is expected to stock has increased 43 per cent in the last 8 years. This has been a result of product introductions and extensions of product lines which bring on an ever increasing number of varieties, sizes and shapes of packages. ("Retailers Getting Fed Up", Canadian Grocer, 1989);

- 58 per cent of all Canadian packaging is used in the food and beverage industries. ("Packaging in Canada-Industrial Consumers", PAC, Submission to CCREM, October 1988);

- In Quebec, 2.2 million tons of packaging is disposed of yearly costing tax payers $160 million in transportation and disposal. (Quebec Ministry of Environment, 1988);

- In a study for the Society of the Plastics Industry, it is forecasted that for the 15 year period from 1985 to the year 2000, the plastics packaging r ..ket will have grown by approximately 80 per cent. ("Plastics: A.D. 2000", Chem Systems, Inc., 1987);

- "Modern Plastics" Annual Report on the plastics industry concludes that, despite recycling efforts, by the year 2003, 72 per cent of plastics packaging will require land filling or incineration. ("A Look at Plastics in 2003", Waste Age, July 1989, p.161).

These trends are disturbing, and indicate that packaging forms a major and increasing component of the municipal solid waste stream.

2.2 The Roles of Packaging

Packaging plays a number of important roles in regard to the consumer, such as **product protection**, transportation, dispensing, the **dissemination of vital product information,** and in **product differentiation.** These vary in terms of importance and the potential they offer in terms of source reduction initiatives. Product protection and the dissemination of vital product information, such as that required to meet government regulations, for example, are necessary functions of packaging which afford only limited opportunities to address packaging waste through source reduction initiatives. Packaging's role in product differentiation and advertising is, on the other hand, not critical to ensuring the health and safety of consumers and therefore may represent one area in which some inroads towards the source reduction of packaging can potentially be made.

The most important role of packaging is in **product protection.** Packaging is required to ensure product quality, integrity and safety during transportation and storage. Limited opportunities exist to reduce the amount of packaging used in product protection through the employment of stronger, lightweight materials. At the same time, however, growing consumer concerns about product tampering and storage are contributing to increases in the amount of packaging required to ensure health and safety and satisfy the consumers' desires.

An additional role of packaging is in the dissemination of important product information. Regulations dictate that certain product information must be provided to consumers, such as ingredients, directions for use and safety considerations. Packaging is the principal vehicle through which this information is communicated.

A further role of packaging is in providing for consumer convenience and acceptance. In addition to playing a key role in product differentiation through advertising, packaging aims at maximizing acceptance through the provision of convenience in storage and handling, and in ensuring compatibility with the habits and lifestyles of consumers. This role of packaging is becoming increasingly important, as media sophistication and industrial competitiveness continue to increase. It is, however, less critical than health and safety

considerations and therefore affords some opportunities for packaging waste minimization through source reduction. The amount of packaging associated with "wasted space" in some grocery products, for example, could be potentially reduced through the down-sizing of advertisements.

Overall, it is important to note that packaging serves a number of essential functions in relation to the consumer, and these functions must be kept in mind in the design of any realistic packaging waste reduction initiatives.

2.3 The Canadian Consumer: An Overview

There are a number of broad demographic, economic and other trends which have emerged in Canada over the past several years that have, in combination, contributed to our present status as a relatively wasteful or "throwaway" society. These trends are highlighted below, to provide a context for examination of consumer behaviours vis-a-vis the packaging and waste-related issues under review.

From a demographic perspective, some of the major trends in Canada include the following:

- a decreasing rate of population growth;
- continuing aging of the population;
- increasing numbers of single-person households;
- continuing rural-to-urban migration.

Economic trends include, for example:

- increasing affluence, derived from more multiple-income families and greater participation of females in the labour force;
- increasing levels of discretionary income;
- continuing fragmentation of the market, growth of a "global" marketplace and integration of trade blocks;
- continuing pressure on natural resources;
- increasing recognition of the need to integrate the environment and the economy in decision-making (i.e., the "greening" of the marketplace);

Major socio-cultural trends include the following:

- continuing focus on pursuit of "healthy" lifestyles;
- increasing levels of social and environmental awareness;
- increasing leisure time.

In addition, technological trends should be noted in regard to the current study, in light of such things as, for example, further innovations in communications technology, and continuing development of convenience-oriented products such as microwave ovens.

These trends, along with other factors, have jointly contributed to the solid waste management crisis throughout North America. Demographically, Canada is rapidly becoming a "middle-aged" society. Throughout the 1990's the 34-to-49 year old segment of the population will be the dominant group, and be at the peak of their "earning power". An interesting dichotomy is emerging from this situation. On the one hand, we see an affluent group characterized by multiple-income households to whom "time-saving" is a critical issue, and who demand, and will pay for, **convenience.** On the other hand, this same group is becoming increasingly aware of environmental issues, can create the leisure time to take an interest in, and become involved in, environmental and other "socially-responsible" issues, and can presumably afford to pay a premium for "environmentally-sensitive" products.

The growing awareness of consumers in terms of health and the environment is leading increasingly to consumer choices of products that are perceived to be healthy and "friendly" to both people and the environment, and this is leading increasingly to on-going "greening" of the marketplace.

3.0 THE CONFUSED CONSUMER: WHAT THE POLLS SAY

In recent years, concern over the degradation of our environment has become widespread, and such concern now ranks as the predominant issue in the minds of the majority of Canadians according to a large number of polls. At the same time, however, the polls also indicate that the response of consumers is one which is characterized by confusion and uncertainty due to a dearth of accurate information.

One recognizable turning point, in terms of public awareness of our grave environmental problems, came in April 1987, when the World Commission on Environment and Development, under the auspices of the United Nations and chaired by Prime Minister Gro Harlem Brundtland of Norway, released a "Call For Action" in the book Our Common Future. The report presents a disturbing portrait of the future, and alerted many people to the very real crisis facing our planet. On the positive side, the Commission describes changes needed to provide a basis for development founded on enhanced environmental resources and popular participation in decision-making. The report also brought forward the concept of **sustainable development** to describe "development that meets the needs of the present without compromising the ability of future generations to meet their own needs".[1]

The growing awareness and concern about the seriousness of many of our environmental problems, including solid waste management, is reflected in a number of polls and surveys carried out over the past two to three years. For example, in the fall of 1987 the Environmental Monitor Report[2] indicated that 50 to 60 per cent of Canadians were "very worried" about air quality, waste management, depletion of resources and hazardous goods movement.

The Angus Reid polls have further indicated that 80 per cent of Canadians are dissatisfied with what the government is doing with regard to environmental protection issues and want to see a more active government role.[3]

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[1]Source: Our Common Future, World Commission on Environment and Development, 1987, p.43.

[2]Source: "Ranking of Environmental Issues", The Environmental Monitor, The International Environmental Monitor Ltd., fall, 1987, cited in "Implications of Environmental Issues for Food Packaging", Agriculture Canada, 1989, p.1.

[3]Source: "The Environment: Public Concern and the Government's performance", Angus Reid Group, 1989.

The polls and surveys, which have been carried out throughout Canada, provide an interesting overview of consumer attitudes, in addition to an indication of the differences between eastern and western Canada consumers. Some of the detailed poll results are confidential cannot be cited. We can, however, provide some of the publicly-released findings of these surveys, as reported on in the media and other literature.

In terms of overall solid waste management issues, many polls have focused in on the area of recycling. For example, the Environmental Monitor's 1988 report on "Transport and Disposal Issues"[4] indicates that eight in ten Canadians believe that not enough priority is currently being given to the recycling of waste materials, such as paper, glass and metal. Seventy per cent said that they would definitely participate in a curbside recycling program or are already doing so.

With specific respect to consumers' purchasing attitudes and levels of concern about environmental issues, the Grocery Products Manufacturers of Canada (GPMC) carried out a Canada-wide survey of grocery shoppers in 1989, and identified a number points of interest with respect to the present study,[5] as follows:

- Women are more concerned about the environment than men;
- People who work full time are less concerned than those shoppers who do not work outside the home;
- Those living alone express more willingness to pay for environmentally safe products and are more likely to look for recyclable packaging than are couples or families;
- Shoppers in the lower income categories expressed a stronger degree of environmental awareness.

The question of whether consumers are willing to pay more for "environmentally-sensitive" products/packages has been asked recently in a number of polls and surveys. The Angus Reid report on the environment[6] found that 75 per cent of Canadians said that they would pay more, and the GPMC's "Grocery Attitudes of Canadians" survey[7] has indicated that 80 per cent of their grocery shopper respondents were willing to do so. Further, 83 per cent of Canadians surveyed by the Environmental

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[4]Source: "Transport and Disposal Issues", The Environmental Monitor, The International Environmental Monitor, Spring, 1988.

[5]Source: "Grocery Attitudes of Canadians", GPMC, 1989.

[6]Source: op cit

[7]Source: op cit

Monitor said they would pay extra to support curbside recycling efforts in their community.[8]

Despite their stated willingness to pay for products that are environmental-sensitive, the GPMC survey found that only about 33 per cent of shoppers would actually look for recyclable/biodegradable packaging on a food product, and about 36 per cent would check for this on other household products, indicating perhaps that there is some concern about packaging waste but that it has not yet become a "majority concern" among shoppers.

The Environmentally Sound Packaging Coalition (ESP) recently carried out a "B.C. Consumer Poll on Packaging", based on surveys of shoppers at major grocery outlets. Some of the relevant findings were as follows:[9]

- 74 per cent of respondents stated that they consider the environment when making purchasing-choices;
- 65 per cent of consumers rated themselves as "very concerned" or "concerned" about the issue of our packaging and garbage problem;
- while 82 per cent agreed that "some" packaging is necessary, 52 per cent said they thought that "most" packaging is unnecessary;
- 93 per cent of polled B.C. Consumers said they would support a ban on some types of packaging; 29 per cent said they would like to see "styrofoam" banned, and 28 per cent mentioned "plastic";
- when asked to give examples of packages they thought were NOT "environmentally friendly", 74 per cent of respondents mentioned "plastic";
- when asked to indicate packages that ARE considered to be "environmentally friendly" 56 per cent mentioned types of paper packaging, while 9 per cent mentioned "degradable" and 5 per cent mentioned "refillable";

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[8]Source: op cit

[9]Source: "B.C. Consumer Poll on Packaging", ESP Coalition, December 1989.

- 97 per cent of respondents indicated a willingness to participate in a recycling program, although 58 per cent said that they did not know the recycling symbol;

- 97 per cent said products labelled "environmentally friendly" should be subject to some form of testing.

A major poll conducted in mid-1989 was the **Southam Environment Project** carried out by the Angus Reid Group. This comprehensive survey (over 1,500 Canadian adults were polled) was unique in many respects, in that it was designed to gauge respondents understanding of environmental problems and included a new research technique which allowed responses to be broken down based on psychographic segments (i.e., categories based on shared attitudes). A unique comparative survey of Grade 8 students was also carried out.

Some of the overall findings of the Southam poll which have been publicly released and are of relevance to the current study include the following:[10]

- The majority of Canadians now consider the environment the most pressing issue in the country, compared to only 1 in 10 in the fall of 1988 and 1 in 20 in February 1988;

- They state that they will accept prices 10 per cent higher for packaging which is environmentally safe (66 per cent) and want politicians to do their share by passing stricter laws;

- Two-thirds would accept a 50 per cent increase in the cost of garbage collection;

- Eighty-six per cent support the concept of curbside recycling;

In terms of the various psychographic segments of the population, the Angus Reid Group poll identified seven distinct groups, as summarized below:

- **The Activists**, representing the "dark green" end of the spectrum, are young, well-educated and informed people who are actively engaged in causes and represent 18 per cent of the population;

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[10]Source: Series of newspaper articles in Saskatoon Star Phoenix, October, 1989.

- **The Enthusiasts** are the smallest group (9 per cent). They are categorized as being scrupulous in their own behaviour, in terms of recycling for example, although they tend to be locally focused, not attuned to the global nature of environmental issues, and confident that science and technology can provide the necessary solutions;

- **The Privileged Optimists** are the largest group (20 per cent). They tend towards conservatism, do not believe the "doom-and-gloom" environmentalists and believe that the next generation will be more careful;

- **The Fatalists** (13 per cent), think most efforts to improve our environment are futile, and see no reason to act as nothing can be done;

- **The Anxious** (15 per cent), include people who are concerned to the point of depression but feel powerless to act. While their concern is real, these people feel cut off from avenues of action;

- **The Apathetic** (14 per cent), include those people who do not take any active interest in environmental issues;

- **The Hostile** (12 per cent) are that group identified as being negative and unconcerned about environmental issues.

Over all, the poll/survey data summarized above indicate a high level of concern with regard to environmental issues and a strong level of support for the instigation of mitigative measures. Few other comparative comments are possible with regard to the polls, as questions, geographic distributions and media coverage vary greatly from one to another.

While the poll results are encouraging and may, in fact, be indicative of a fairly significant shift in terms of the **attitudes** of the public towards the environment and solid waste management issues, the figures presented must be viewed with a measure of caution. It is important to recognize that environmental awareness and behaviour now have a high social value, and people are often responding to survey questions in what they perceive to be a societally-acceptable manner. It is interesting to note the findings of a poll conducted in Buffalo, New York, recently which found that although a reassuring 78 per cent of all respondents said that they would be willing to separate their garbage into four containers, only 26 per cent thought their neighbours would do so. The researchers determined, by comparing interview data with actual trash over the years, that **"the most accurate description of the behaviour of any household lies in that**

household's description of the behaviours of a neighbouring household".[11]

Section 4, following, presents a discussion of some of the recent experience of industry representatives, how survey data can and has influenced their decisions, and some of their comments as to the current state of consumer and industry awareness/knowledge related to the issue of packaging.

[11]Source: "Rubbish!", William L. Rathje, The Atlantic Monthly, December, 1989, p.106.

4.0 INDUSTRY EXPERIENCE

4.1 Introduction

The entire range of issues with regard to consumers and packaging is of direct and obvious interest to industry as their economic viability depends on consumers' demand for their products. As such, industry is very much interested in consumer trends and attitudes as expressed in polls and surveys, and ultimately in how those trends and expressed attitudes may ultimately translate into sales patterns.

This report section presents some comments derived through our industry interviews (see Appendix B for list of contacts) and a literature review. While by no means providing "the" answer to this very complex subject, the comments received are thought-provoking and certainly indicative of the confusion that exists in the minds not only of consumers, but of industry executives as well.

4.2 Industry Survey - Agriculture Canada

A survey of industry executives was recently carried out for Agriculture Canada on the subject of packaging and the environment, as part of a study on the implications of environmental issues for food packaging.[1] The survey results indicated that industry is "very much aware" of environmental issues. Some key results which emerged are summarized below:

- 81 per cent of the executives interviewed said that they **actively seek information** on the environmental compatibility of packaging materials they use, mainly from their suppliers, industry publications, trade associations and government agencies; 16 per cent said they also carry out research on this subject on their own, and less than 1 per cent solicit advice from environmental groups;

- 75 per cent expressed **concern about government regulations** and also about researched and politically expedient solutions;

- 66 per cent expressed **concern about environmental issues** related to waste management, pollution etc., although 25 per cent indicated they are worried about the **costs** of solutions;

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[1] Source: "Implications of Environmental Issues for Food Packaging", Agriculture Canada, 1989.

- 66 per cent reported they have changed packaging because of environmental concerns, mainly in relation to CFC's and toxic materials;

- In terms of industries perceptions of consumer concerns about packaging design/technology, "most" executives interviewed agreed that what consumers **do** want is "recyclability or reusability" and what they do **not** want is "overpackaging";

- 50 per cent feel that consumers are concerned about environmental issues, although several questioned the actual degree of importance consumers place on environmentally-sensitive packaging and their willingness to pay for it;

- 33 per cent believe that consumers are interested in how package performs **and** how to dispose of it; most industry representatives felt that consumers want **convenience** at **low cost**, and a minimum of packaging, while also having recyclability or degradability;

- Most believe the increasing environmental awareness of consumers is a positive trend, and 75 per cent agreed that such consumer trends presented them a **market opportunity;**

- Overall, the respondents see the **consumer as the prime motivator for changes in packaging,** and most estimate that consumers will pay a 3 per cent premium for environmentally-sound packages;

- When asked to express their ideas for solutions to the excess packaging problem, the "4 R's" headed the list. **Reduction** in the amount of packaging used was seen as the best solution, but it was stressed by the industry representatives that the most powerful reason for industry to do this would be **consumer demand.** Re-use potential beyond the beverage industry was noted as an area that should be acted on, and in terms of recycling, executives stressed the need to increase processing capability and make recycling easier for consumers;

- Other ideas put forward about possible solutions included: more education, "high-tech" incineration research and implementation of some types of fee payments.

4.3 Interviews

Our Study Team carried out telephone interviews with executives of a dozen major industries, in light of the fact that extensive surveying was not possible within the context of the present study, to gain an overview of some of their opinions on consumer-related issues. They were asked to describe their company's activities with regard to consumer research, any packaging reduction or other such initiatives undertaken, and any trends they have observed. The question regarding who should drive excess packaging reduction initiatives – industry or consumers – was also asked of each respondent. Poll and survey results were discussed, to identify whether in fact the attitudes being expressed by consumers in the polls are actually borne out in terms of their purchasing patterns. Whether consumers **will** actually **pay more** for packaging that is advertised as being environmentally-sensitive, for example, was discussed.

The industries interviewed fall into the general categories of packaging producers, soft-drink producers/bottlers, grocery product producers and retailers, and producers of non-food-and-beverage household goods. Packaging producers include glass manufacturers, the plastics industry, paper producers and so forth. As outlined in Section 2, packaging has evolved into different areas over the past many years, with particularly rapid growth in the plastics industry and in all types of packaging related to convenience (i.e., microwavable packaging).

Packaging producers' comments included the following:

- "Industry is very confused";
- "The message has gotten through loud and clear. I'm actually amazed at how proactive industry has become recently. Almost all have become extremely sensitive to the issues and there is almost a 'magnifying effect' whereby initiatives are being undertaken that are ahead of the public. Industry is also becoming better at reading the public, and the pressure on industry will continue.;
- "Polls are saying consumers will pay more but their behaviour is schizophrenic";
- "Our initiatives are just starting. This while environmental thing has just taken off over the past nine months";
- "It is regrettable that 'recyclability' is the focus now, because it is not the 'golden solution' to the waste management problem".

The food and beverage producers/packagers interviewed include soft-drink and alcohol producers/bottlers, grocery retailers, food product producers and representatives of industry associations. Grocery retailers, notably Loblaws and Miracle Mart, have done much to promote the concept of "green" products over the past year. Some producers began, in 1989, to market products specifically advertised as having environmentally-sensitive packaging, such as Procter & Gamble's "Enviro-Pak" and Pepsi-Cola Canada's recently introduced (in Quebec) Pepsi-Montplas bottle. Such initiatives are admittedly being developed with a focus on the corporate "bottom line", but can, at the same time, be beneficial to the environment and help to relieve the solid waste management problem if carried out in a responsible and educated manner.

Procter & Gamble's "Enviro-Pak" and other such environmentally friendly products (e.g. new Crisco bottle) present an interesting case with regard to consumer attitudes and behaviour patterns. This is one of the first packaging-reduction initiatives in Canada that has been targeted specifically at environmental concerns and marketed as such. Although definitive conclusions are not possible at this time as the packages have only been available for a few months, it is interesting and perhaps significant to note that despite a price that is approximately 15 per cent **lower** than the plastic bottle, the "Enviro-Paks" are selected by only 1 in 5 of the products' purchasers. Why this is the case is unclear at this time, although it is indicative of consumers' apparent desire for **convenience**, and their willingness to pay more for it. It may also indicate that more education is needed or that local stores are not passing on the price savings to the consumer.

The "Pepsi-Montplas" bottle was introduced in Quebec in mid-1989. It is a two-piece two litre PET bottle with a base cup made from thermal-formed recycled PET. Pepsi's focus group surveys indicated that cola products are price-sensitive. Further, it was determined that **consumers were clearly not prepared to pay a premium for this package that was made partially from recycled materials, but that at price parity many consumers would prefer the recycled package.**

Some examples of the general comments received from other food and beverage producers and retailers who were interviewed include the following:

- "Poll data, with regard to consumers' willingness to pay more, may be tied to the economy, and will likely shift a lot from "good times" to "bad times";

- "Although industry is aware of the trends, we don't really feel 'pushed' by consumers for environmentally-sensitive packaging, at least not yet";

- "Our focus group research indicate that there is an unfortunately high level of **misinformation** out there in the hands of the media, the educators and the politicians. The 'bio-degradability myth' is an example, as is the idea that plastics are 'bad' for the environment while paper is not. There are just too many misconceptions";

- "A system of **incentives** would be better than any government action like the 'EcoLogo'. Maybe charging people by the volume of garbage they dispose of. Right now there is no incentive to be careful";

- "The Protocol should help to define some terms so people won't misuse them.";

- "Polls are suspect. People overwhelmingly said, for example, that they wanted caffeine-free colas and their actual response in the marketplace was not in line with this data";

- "Marketers will primarily be driven by consumer expectations and demands but herein lies a dichotomy. Currently, marketers are seeing growing expectations for environmentally-friendly products and packages while at the same time consumers are demanding more exclusivity in design, a premium image, price/value, convenience, disposability, tamper evidence, etc. These will be the market forces which will most influence [our] packaging";

- "We see the growing awareness and concerns for environmental issues but also a lack of knowledge and appreciation for the complexities, the economic and competitive ramifications and the eventual costs to consumers";

Overall, the industry representatives have been said to generally agree that they are very much concerned about environmental packaging issues, that education of the consumer is of paramount importance, and that "greening" of the marketplace will continue and should be addressed by industry.

5.0 RECENT GOVERNMENT ACTIVITIES/INITIATIVES RELATED TO CONSUMERS AND PACKAGING

The Canadian government has had relatively limited involvement in regulatory activities that are directly related to the "consumers and packaging waste" issue. While legislation has been enacted with regard to labelling, packaging itself has not been dealt with except in terms of defining certain health and safety standards, and standard volumes, sizes, etc. which would allow consumers to make comparisons between products. One area in which the government has been quite active, however, is in limiting the use of CFCs as a blowing agent for foam products.

Recently Environment Canada has established the **Environmental Choice** program, to help consumers identify those products which diminish the burden on the environment. An **EcoLogo** symbol has been designed, which is soon to appear on products which, for example, are made of recycled or recyclable materials and minimize the use of environmentally hazardous materials. Draft guidelines for several product categories have ben put out for public comment, and, when approved, will outline the criteria which products will have to meet in order to be able to use the EcoLogo symbol. An example of "draft" guideline ("Cardboard Containers from Recycled Paper") is included for general reference as Appendix A.

6.0 SOME RECENT INITIATIVES OF NON-GOVERNMENT ORGANIZATIONS (NGO'S)

There are a very large number of environmental and consumer groups in Canada who have a direct interest in the "consumers and excess packaging" issue. The Consumers' Association of Canada (CAC), for example, has taken a major interest in this subject, and its representatives are directly involved in the NAPP initiative. CAC (Ontario) has issued a policy paper on the solid waste management issue, and is actively working to educate consumers on the "4 R's". CAC (Ontario) has stated their position that legislating for reduction would be difficult and inefficient, and recommends that advertising, promotion and public education in schools and through the media should be used to make consumers aware of the issues and the solutions.[1] CAC (British Columbia) has recently established, with other non-governmental associations in B.C., the **Environmentally Sound Packaging Coalition** to specifically address these issues, and they are already carrying out surveys (see Section 3), printing newsletters, participating in seminars and meetings, and hosting a workshop on "The Challenge: Reducing Packaging for the 90s Consumers, Business and Government: Teaming Up to Reduce, Reuse, Recycle" (April 1990).

Another packaging-specific initiative has been initiated by **Environmental Action Ontario (EAO)** which began, in January 1990, its **Excess Packaging Campaign.** EAO is an umbrella organization comprised of over 40 groups who have an interest in this subject. The group has targeted the food industry for its initial campaign, and its goals are to promote legislation and corporate policies to: reduce the waste generated by fast-food outlets; encourage Provincial legislation imposing a special tax on disposable take-out containers, with revenues dedicated to waste reduction efforts; encourage supermarkets to reduce their excess packaging. During their one-year campaign, each participating group will collect endorsements on the three main goals, and work towards education of the public.

Another example of a recent "consumers and packaging" initiative is the "Citizens' Guide to Excess Packaging" which is now being prepared by the Waterloo Public Interest Research Group. The focus of the group is on public education and on changing people's attitudes about packaging. They are also looking at what industry is trying to promote with the public, and how industry wants the public to be educated.

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[1] Source: "1989 Policy Position: Garbage - The Next Step", Consumers' Association of Canada (Ontario).

Numerous other non-governmental agencies, ranging from "generalist" environmental groups to recycling associations, are engaged in activities related to one or more aspects of the issue under study. Indeed, several NGO representatives who were interviewed stated that one problem they are facing is that there are now too many groups involved in such initiatives, and that media attention, funding and so forth are being spread very thin as a result.

7.0 OTHER JURISDICTIONS

While study of other countries' consumer trends and activities related to excess packaging is of general interest, care should be taken in terms of comparing one situation to another. Socio-cultural, political, economic and many other conditions create very different situations, and as such direct comparisons are often not of relevance. Comprehensive research into this area has not been carried out for the present study, although some general data has been outlined below.

The U.S.A. is close to Canada in terms of garbage generation by household consumers. The average household discards the equivalent of about 350 large garbage bags per year (over 20,000 litres). This is **twice** the amount of garbage generated in most European countries, representing an average of 1.6 kg per day per person, versus 0.5 - 0.9 kg per person per day in Europe. This data may not, however, take into account the large proportion of yard waste that North Americans produce due to more private dwellings and larger gardens.

In the United States, 85 per cent of the solid waste produced goes to landfill sites, with 11 per cent being recycled. In Germany, 55 per cent of the waste goes to landfill.

In Japan, only 25 per cent of the garbage goes to landfill, with 40 per cent being recycled. The Japanese generate an average of approximately 43 per cent less waste than the average American. Out of necessity, they have developed a highly sophisticated system of waste management which recognizes that no one system represents the solution. Incineration, landfill, recycling and reduction all play important roles. In most areas of Japan, mandatory separation of burnable from non-combustible trash is strictly enforced. Incineration, while still controversial, is carried out at over 2000 incinerators.

Overall, it is evident that a number of other countries have initiated strict solid waste management measures, and educated the consumers to participate.

8.0 CONCLUSIONS AND IMPLICATIONS FOR THE NAPP

Our research conducted for this "overview" report as a background document for the National Packaging Protocol (NAPP), cannot, in light of the complexity of human behaviour and the absence of extensive research, be definitive in its conclusions. However, it has led to the identification of several trends and issues which will have to be carefully considered in order to make consumers effective participants in excess packaging reduction efforts.

8.1 Major Issues and Trends

The major trends and issues identified are summarized below:

LACK OF RELIABLE INFORMATION

Our research in this study has indicated that there is, in fact, a lack of information available on Canada's waste stream, and even less available on consumer issues related to waste management. As one writer put it:

> "At present we have more reliable information about Neptune than we do about this country's solid waste stream."[1]

MISINFORMATION AND CONFUSION ABOUNDS

Given the lack of reliable data, misinformation is rampant. "Degradability", for example, is poorly understood. Consumers are being bombarded by educators, media, industries, etc., with a myriad of often conflicting and erroneous information. This presents a potentially very serious problem, whereby people may begin to "turn off" the entire issue in the face of an increasingly confusing array of information.

POLL RESULTS ARE SOMEWHAT SUSPECT

Although the polls are providing some interesting and valuable insights into the attitudes and feelings of Canadians, it is clear that much of the information derived from the polls must be viewed with caution.

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[1]Source: "Rubbish!", William L. Rathje, The Atlantic Monthly, December, 1989, p.106.

People will respond to many questions in a way that they perceive to be "socially-correct", and this is clearly not always reflective of how they will actually respond in the marketplace.

PEOPLE MAY NOT BE WILLING TO PAY MORE

While the polls indicate that most people will pay more for environmentally-sensitive products/packages, preliminary evidence based on marketing initiatives such as the Enviro-Pak and the Pepsi-Montplas bottles indicate that this may in fact not be the case. More research is required in this area.

INCREASING ENVIRONMENTAL CONSCIOUSNESS

Although information on waste management issues is scanty at the present time, the public is becoming increasingly aware of and concerned about protection of our environment. The problem appears now to be that they are not quite sure how they can personally be effective.

"CAUSE-RELATED MARKETING" BY INDUSTRIES WILL CONTINUE TO INCREASE

Industry has begun to seriously consider the solid waste management aspects of their designs, not only because of negative public reactions but because marketing experts are declaring that it is a profitable way to attract consumer interest. "Recyclability", for example, has become a new market "hot button", and provides an opportunity for industry to be seen as the "good guy".[2] While this can be seen as a positive trend, care must be taken to avoid a situation where every product is advertised as being "environmentally-sensitive" and erroneous claims are made as industries and other agencies jump on the "green" bandwagon.

CONVENIENCE A TOP CONSUMER PRIORITY

The need for convenience would appear to be at the top of the typical consumer's mind in 1990. This will likely continue as we move into the new decade, which would indicate that products/packaging must

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[2]Source: "Promoting Source Reduction and Recyclability in the Marketplace", U.S. Environmental Protection Agency, September 1989, p.36.

not only be environmentally-sensitive, and competitively priced, but may also need to be convenient to use in order to be successful.

8.2 Conclusions

Although clearly the "jury is still out" on the issues under discussion in this report, the data which has come to light is important in terms of the goals of the NAPP. Given the dynamic interplay between all of the "players" in the marketplace (see Figure 1-1), consumers must be fully considered in the design of any serious waste reduction initiatives. Consumer-oriented educational and other programs can offer long-lasting solutions. Directed efforts are required to help people to become more informed about the issues, to guide them as to what they can do as individuals and collectively, and to impart to them the importance of their choices and their role in the solid waste management process.

Some conclusions/recommendations which should be considered in relation to the design and implementation of the National Packaging Protocol are as follows:

EXPANSION OF KNOWLEDGE BASE IS REQUIRED

- Continued research initiatives are required, to study solid waste management and socio-behaviourial issues in detail (i.e., consumer attitudes expressed in polls versus actual choices made; public concerns and awareness levels related to product lifecycles, etc.);

- Establishment of procedures, guidelines and a monitoring programme, to ensure that accurate information is being disseminated and that the current flow of misinformation is abated. Standardization is required with regard to definitions, labelling and other messages;

CONSUMER EDUCATION IS KEY

- Consumer education is a major requirement, as a well-informed consumer can make appropriate purchasing choices and stimulate demand for environmentally-sensitive products/packages;

- Educational programs must be sophisticated, and of high quality, to compete with other advertising;

- Public school programmes should be developed, with a specific programme aimed at teenagers;

- Teacher training for information dissemination should be developed;

- Multi-media campaigns should be designed to make use of all vehicles. Poll research would seem to indicate that television has the widest reach, and data should also be disseminated based on an organized, long-term strategy involving newspapers, magazines, radio, billboards and environmental groups. Other personal contact mechanisms such as mall displays, mailings, public forums and debates and videos, should also be considered.

- Industry should be educated, so that it can develop and present information on its products in an effective and accurate manner;

- Labelling of products and packages to indicate their contents, recyclability, etc., has often been mentioned as a positive educational mechanism. A comprehensive study should be carried out to examine this issue in detail;

- "Grass roots" initiatives should be encouraged, such as community-based pilot projects designed to create environmental awareness;

- A consumer "Hot Line" could potentially be established to allow consumers to direct their queries to an informed source.

MARKETPLACE INITIATIVES PLAY A SIGNIFICANT ROLE

- "Cause-targeted marketing" will continue, as industries, retailers and others continue to capitalize on the "greening" of the marketplace. Guidelines and monitoring mechanisms are required to avoid continuing confusion of consumers and industry representatives.

GOVERNMENT INITIATIVES ARE REQUIRED

- Consumers have expressed strongly in the polls (i.e., the Southam poll) their belief that government must play a strong role in environmental and waste management issues.

Overall, the issues and conclusions outlined above indicate that their is a great deal of uncertainty and misunderstanding at the present time with regard to the attitudes, purchasing motivations, and roles of consumers vis-a-vis issues related to excess packaging reduction goals. The National Packaging Protocol should include policies and initiatives geared specifically towards education of the consumer by industry, government and non-government organizations, and should direct actions for further detailed research to be carried out.

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APPENDIX A

EXAMPLE OF DRAFT GUIDELINE
ECOLOGO/ENVIRONMENTAL CHOICE PROGRAM

DISCUSSION DRAFT ECP-??-89

DEPARTMENT OF THE ENVIRONMENT

CANADIAN ENVIRONMENTAL PROTECTION ACT - SECTION 8.(1)(b)

Cardboard Containers from Recycled Paper

The Minister of the Environment is pleased hereby to publish the following national guideline for products of the Environmental Choice Program, namely cardboard containers from recycled paper.

This guideline is number ECP-**-89 in a series designed to minimize the pollution generated by the use and disposal of the myriad of goods which Canadians enjoy. The Environmental Choice Program is a major element in a continuing effort to improve and/or maintain the quality of the natural environment.

Recycling paper will contribute to a reduction of waste paper entering the waste stream in Canada, estimated at approximately 4 million tonnes annually. Waste paper such as old newspaper, printing and writing paper, old corrugated containers and other packaging contributes about 35% by weight to the municipal waste stream. However, not all of the waste paper is recoverable by the cardboard container industry. Recycling also helps to conserve our forests resources. Recycled fibre in the cardboard containers industry is currently less than 50% by weight.

Requiring minimum percentages of x% recycled paper in

envelope cuttings, bindery trimmings, and other paper and paperboard waste, resulting from printing, cutting, forming, and other converting operations; bag, box and carton manufacturing wastes; millwrappers; and finished paper and paperboard from obsolete inventories of merchants, wholesalers, dealers, printers, converters, or others; and
(b) "Post-consumer fibre" such as paper, paperboard, and fibrous wastes from retail stores, office buildings, homes, municipal collection systems and so forth, after they have passed through their end usage as a consumer item, including; used corrugated boxes, old newspapers, old magazines, mixed waste paper, tabulating cards, used cordage, and waste cotton fibre.

"Recycled paper" excludes:
(a) "Wet broke" such as paper recovered from the wet press of a paper machine; and
(b) "Dry broke" such as paper spoiled in the process of drying, calendering, winding, rewinding and trimming, including butt rolls; and
(c) "Pre-commercial waste" such as paper trimmed from rolls in the sheeting process by a cardboard container manufacturer, on-site or off-site, or discarded as a result of defects; and
(d) "Forest residue" such as whole tree chips, sawmill waste and sawdust.

Category Definition

2. This category includes all cardboard container products as further defined in the sub-

from a single mill location.

Product Specific Requirements

4. In order to be authorized to carry the label, the cardboard container must meet the criteria specific to its sub-category.

4.1 Boxboard must contain over x% by weight of recycled paper which includes a minimum of y% post-consumer fibre.

4.2 Containerboard must contain over x% by weight of recycled paper which includes a minimum of y% post-consumer fibre.

Verification

5. To verify a claim that a product meets the criteria listed in the guideline, the Canadian Standards Association will require access, as in their normal practice, to relevant quality control and production records and the right to access to production facilities on an unannounced basis.

Licensing Conditions

6. The logo may appear on wholesale , retail packaging or on the product itself.

7. Wherever it appears the logo must include the words "over x% recycled paper including y% post-consumer fibre" in English and French as applicable depending on the requirement of a particular sub-category.

* The percentage of recycled paper is as specified in the product specific requirements for each product sub-category

DRAFT FOR COMMENT ONLY

APPENDIX B

CONTACTS LIST

CONTACTS LIST	
AGENCY	**CONTACT NAME**
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Industry	
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Tremco Consumer Products	Jim Gillies
Pepsi	Coleen Newell
Procter & Gamble	Glenn Parker
Canadian Council of Grocery Distributors	Tim Carter
Coca Cola Ltd.	Nevil Kirchmann
Grocery Product Manufacturers of Canada (GPMC)	Shelagh Kerr
Tetrapak	Jaan Koel
Spar Group	Bill Kushlik
Seagrams	Harold Pugash/G. Paquet
Dow Chemical	Brian Wastel
Miracle Mart	Bill Shine
Environment and Plastics Institute of Canada	Charmian Entyre
Non-Governmental Institutions/Organizations	
Citizens Network on Waste Management	John Jackson
Waterloo Public Interest Research Group	Kara Symbolic
Canadian Environmental Network	Lynn Sabean
Recycling Council of Ontario	John Hanson
Canadian Environmental Law Association (CELA)	Steve Shrybman
Consumers' Association of Canada (CAC)	Ruth Lotzkar
Environmentally Sound Packaging (ESP) Coalition	Ruth Lotzkar
Environmental Action Ontario (Excess Packaging Campaign)	Tim Grant
Ontario Recycling Council	John Hancock
Pollsters/Consultants	
Angus Reid Group	Ashley Sager
Decima Research	Allan Gregg/Chas Kelly